

(Påminner om uppgift 32.1 igen.)

$$\begin{aligned} a) \quad (32-16) \quad B &= \frac{\mu_0 i d}{2\pi R^2} \quad r = \frac{\mu_0 (J_d \cdot \pi R^2)}{2\pi R^2} \quad r = \frac{\mu_0 J_d}{2} r \\ &= \frac{4\pi \cdot 10^{-7} \cdot 6,00 \cdot 0,0200}{2} \approx \underline{\underline{7,54 \cdot 10^{-8} \text{ T}}} \end{aligned}$$

$$\begin{aligned} b) \quad (32-17) \quad B &= \frac{\mu_0 i d}{2\pi r} = \frac{\mu_0 (J_d \cdot \pi R^2)}{2\pi r} = \frac{\mu_0 J_d R^2}{2r} \\ &= \frac{4\pi \cdot 10^{-7} \cdot 6,00 \cdot 0,0400^2}{2 \cdot 0,0500} \approx \underline{\underline{1,21 \cdot 10^{-7} \text{ T}}} \end{aligned}$$